

AMENDMENTS TO THE SPECIFICATION

Please replace the abstract with the following replacement abstract:

Methods, systems, and apparatuses for defining a target bit rate and collections of coefficients of source data, as well as a global coding order of the collections of coefficients. A plurality of coding units and corresponding allowable truncation points for each of said collections of coefficients and a local coding order of said coding units can be defined. A rate value and a distortion value for each of said coding units can be defined along with an adaptive threshold value for each of said coding units. The encoding of the collections of coefficients is performed in turn according to the global coding order. During the encoding, if a predetermined termination criterion is not met for a particular coding unit, the particular coding unit will be included in an output code-stream, and if the -termination criterion is met, an encoding of the one of the collection of coefficients will be terminated.

Please add the following text before the “Field of the Invention” heading on page 1 of the specification:

Cross Reference to Related applications

This application claims the benefit of U.S. Provisional Application No. 60/450,692, filed March 3, 2003.

Please replace the paragraph on page 11 beginning on line 8 with the following amended paragraph:

Fig. 6 shows the scan order of (a) subband and (b) code block within a subband; ~~and~~

Please replace the paragraph on page 11 beginning on line 10 with the following amended paragraph:

Fig. 7 shows the average PSNR difference between PCRD and SBRA-w (PCRD-SBRA-w) for different values of Δ at different target bit rates; ~~and~~

Please add the following new paragraph directly after the paragraph on page 11 beginning on line 10:

Fig. 8 depicts a flow chart describing successive bit-plane rate allocation (SBRA) in accordance with embodiments.

Please add the following new paragraph directly before the paragraph on page 19 beginning on line 5:

Fig. 8 depicts a flow chart describing successive bit-plane rate allocation (SBRA) in accordance with embodiments. First, a target bit rate may be defined block 801. Collections of coefficients of source data may be defined block 803. A global coding order used to code the collections of coefficients may be defined block 805. Initially, a first collection of coefficients may be selected according to the global coding order block 807. As will be noted below, once the first and any subsequent collections of coefficients are selected, the next collection of coefficients may be selected according to the global coding order block 807. Once a next collection of coefficients is selected, a plurality of coding units for the current collection of coefficients may be defined block 809. A local coding order which may be used to code the plurality of coding units may be defined block 811. For each coding unit according to the local coding order, a rate value and a distortion value may be defined as described elsewhere within this specification block 813. A threshold value for the current coding unit may be defined as described elsewhere within this specification block 815. Next, if a termination criterion is not met as described elsewhere within this specification, the current coding unit may be included in the output code stream, block 819, and a next coding unit may be processed as described elsewhere within this specification. If the termination criterion is met as described elsewhere within this specification, the coding of the collection of coefficients may be truncated at the current coding unit block 821. If no further collections of coefficients remain to be encoded, then the process may end block 819. If more collections of coefficients remain, block 817, then a next collection of coefficients may be selected for encoding and the process may continue until there are no more collections of coefficients to encode.